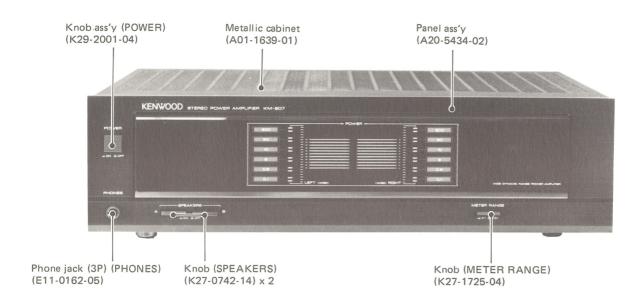
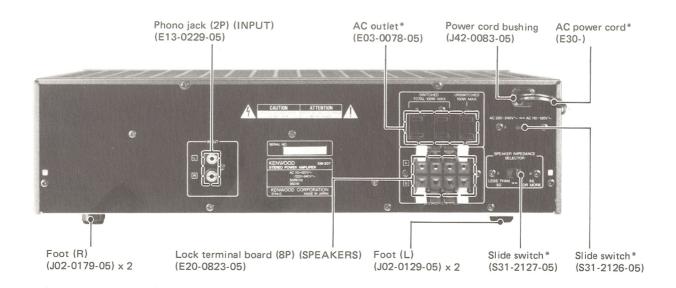
STEREO POWER AMPLIFIER

KM-207 SERVICE MANUAL

KENWOOD

© 1988-3 PRINTED IN JAPAN B51-3501-00 (O) 1646

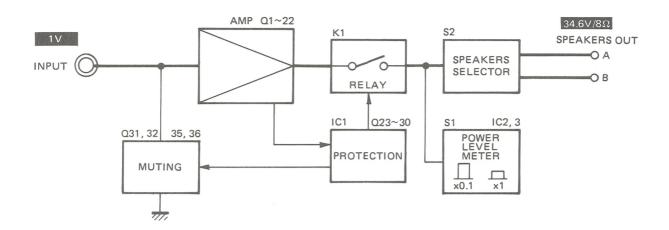






BLOCK DIAGRAM/CIRCUIT DESCRIPTION

BLOCK LEVEL DIAGRAM



CIRCUIT DESCRIPTION

Description of Components

POWER AMPLIFIER UNIT (X07-2430-XX, X07-2460-XX)

Components	Application/Function	Operation/Condition/Compatibility
Q1 ~ 4	Initial stage differential amplifier	Low noise.
Q5 ~ 8	2nd stage differential amplifier	
Q9, 10	3rd stage amplifier	Class A cascade current amplifier.
Q11, 12	3rd stage amplifier	Class A cascade voltage amplifier.
Q13, 14	Bias temperature compensation	
Q15 ~ 18	Class B driver	
Q19 ~ 22	Power amplifier	
Q23 ~ 30	Current protection	
Q31, 32	Input muting	
Q33	Driver for realy driver IC	Current protection.
Q34	Constant voltage control	
Q35, 36	Muting driver	
Q37	AVR	For meter driver.
IC1	Relay driver IC	
IC2, 3	Meter driver	



ADJUSTMENT/REGLAGE/ABGLEICH

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
1	IDLE CURRENT	_	Connect a DC voltmeter across CP1 (L) CP2 (R)	YOLUME: 0	VR1 (L) VR2 (R)	9 ∼ 18 m V	(a)

REGLAGE

		REGLAGE DE	REGLAGE DE	REGLAGE DE	POINS		
N°	ITEM	L'ENTREE	LA SORTIE	L'AMPLIFICATEUR	L'ALIGNEMENT	ALIGNER POUR	FIG.
1	COURANT DE POLARISATION	_	Connecter un voltmètre de CC sur CP1 (G) CP2 (D)	YOLUME: 0	VR1 (G) VR2 (D)	9∼18mV	(a)

ABGLEICH

NR.	GEGENSTAND	EINGANGS- EINSTELLUNG	AUSGANGS- EINSTELLUNG	VORSTARKER EINSTELLUNG	ABGLEICH- PUNKTE	ABGLEICHEN FUR	ABB.
1	LEERLAUFSTROM	-	Einen Gleichspannungs- messer über CP1 (L) CP2 (R) anschließen.	VOLUME: 0	VR1 (L) VR2 (R)	9 ~ 18 m V	(a)



VOLTAGE CHECK TABLE

X07-2430-XX X07-2460-XX

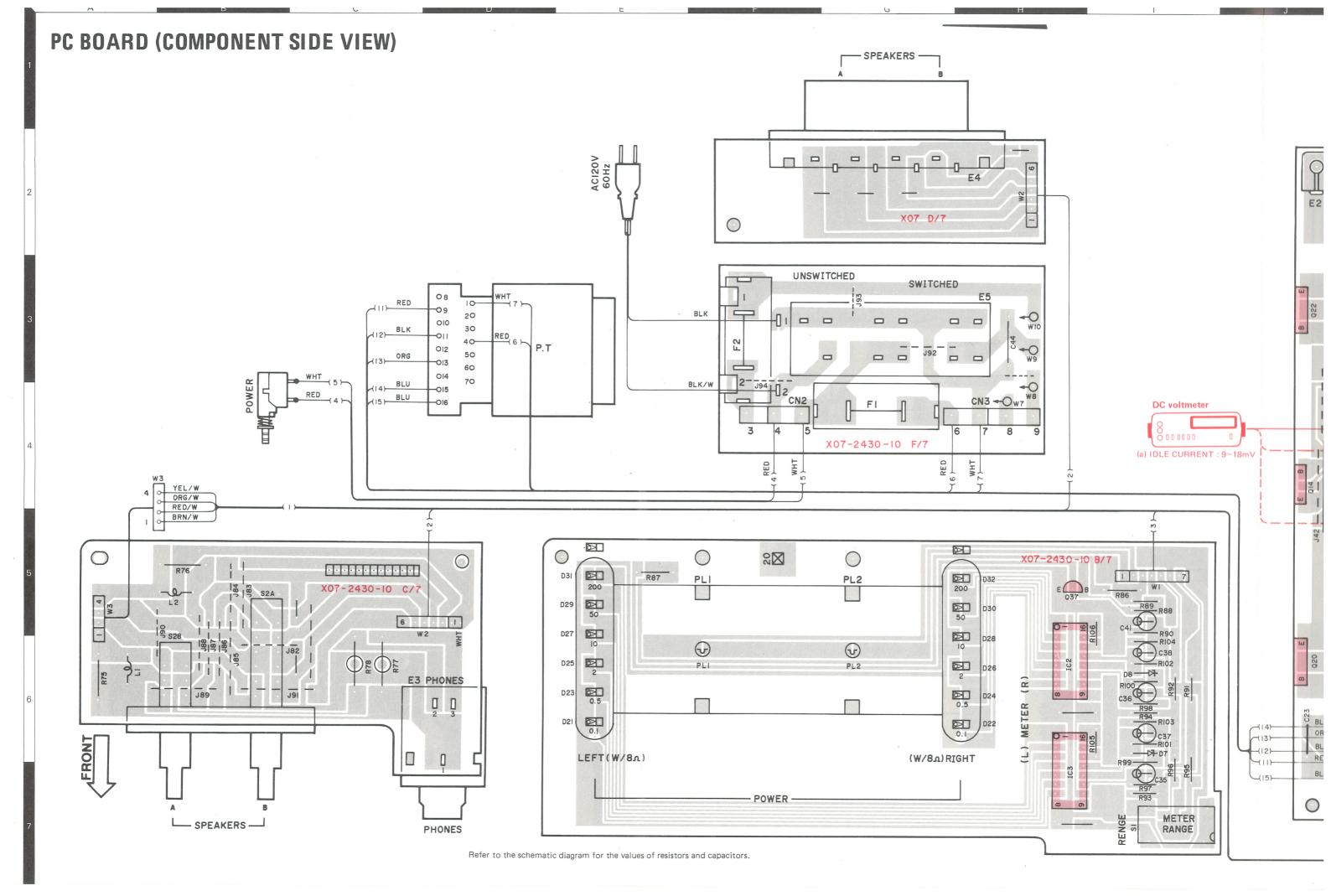
	В	С	Е
Q1 - 4	_	17.7V	- 18V
Q5, 6	17.7V	80.3V	17∨
Q7,8	17.7V	81V	17∨
Q9, 10	80.3V	77.8V	81V
Q11, 12	77.2V	1.2V	77.8V
Q13, 14	_	1.2V	-1.2V
Q15, 16	_	81V	0.6V
Q17, 18	_	-81V	-0.6V
Q19, 20	_	81V	_
Q21, 22	_	-81V	_
Q23, 24	_	_	0V
Q27, 28	_	_	1.2V
Q29, 30	_	_	-1.2V
Q33	81V	_	81V
Q34	24V	34V ,	23.4V
Q35	0V	_	0V
Q36	23V	Relay ON: -12V Relay OFF: 23V	23∨
Q37	_	_	14.7V

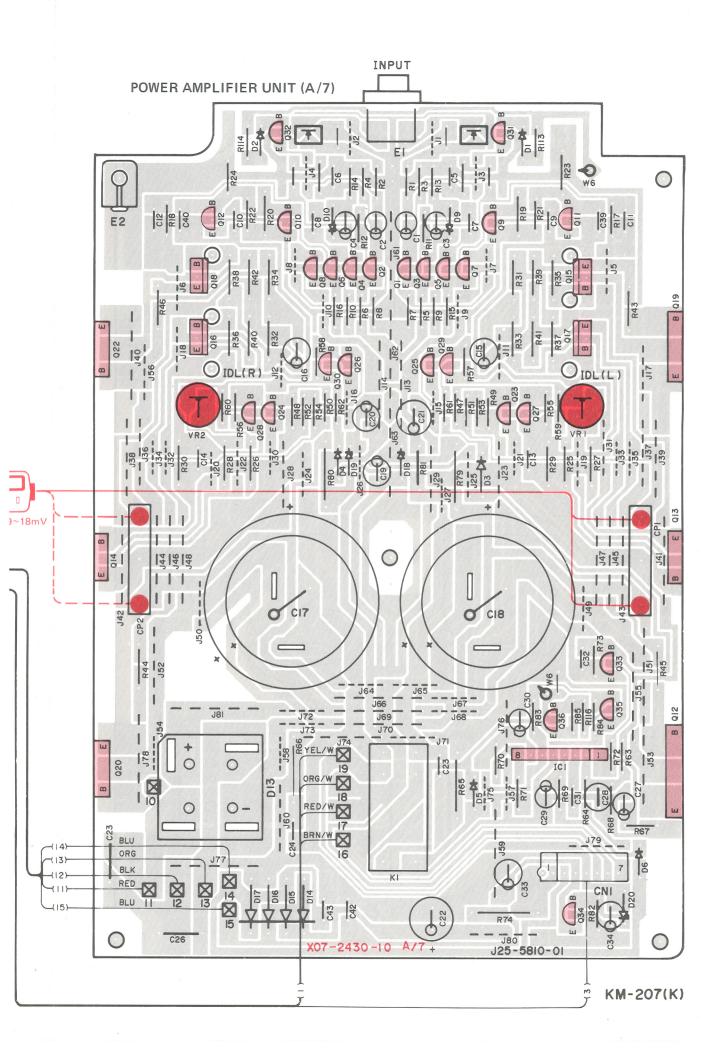
IC1

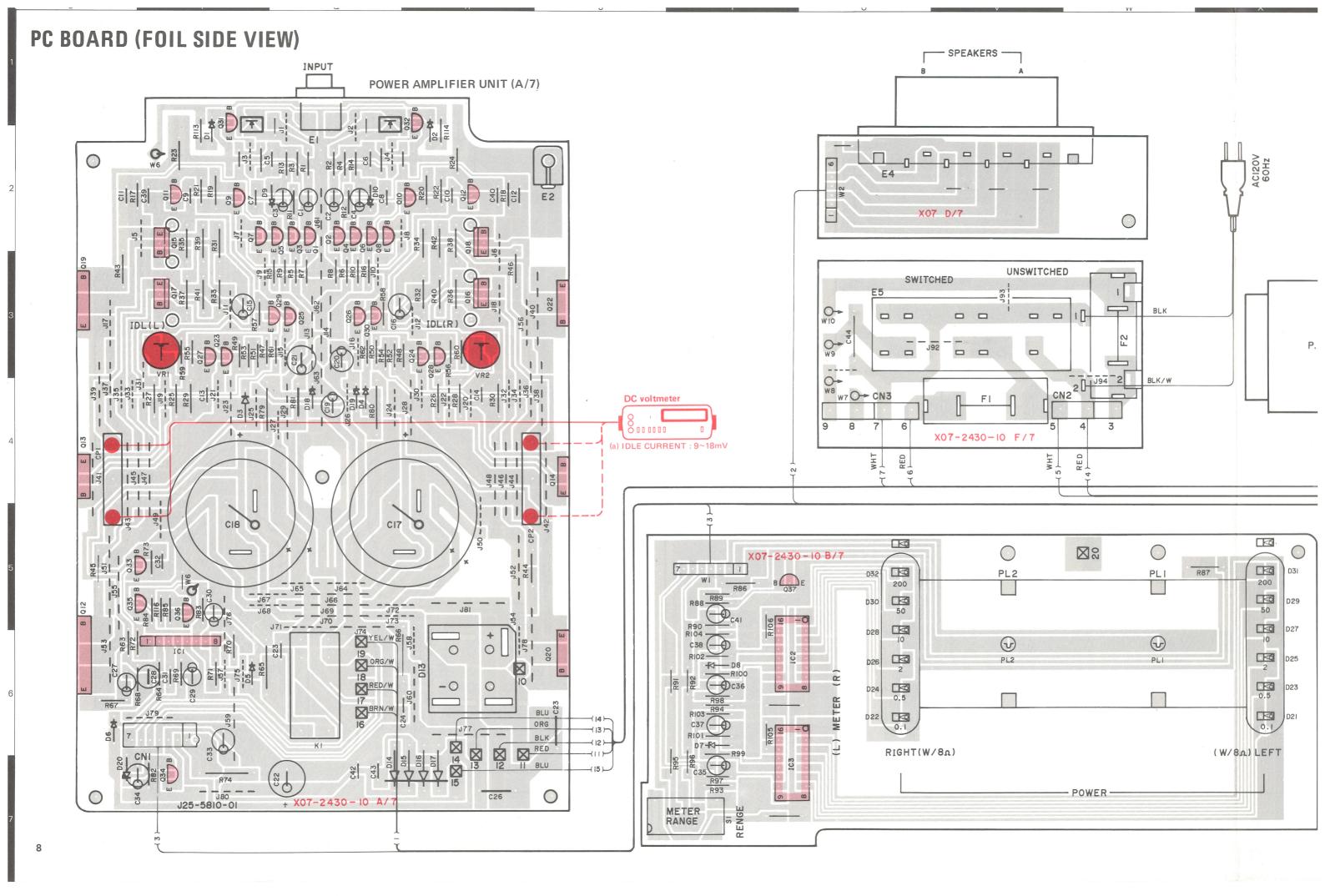
4	2.7V
5	0V
6	0.8V
7	2.2V
8	3.2V

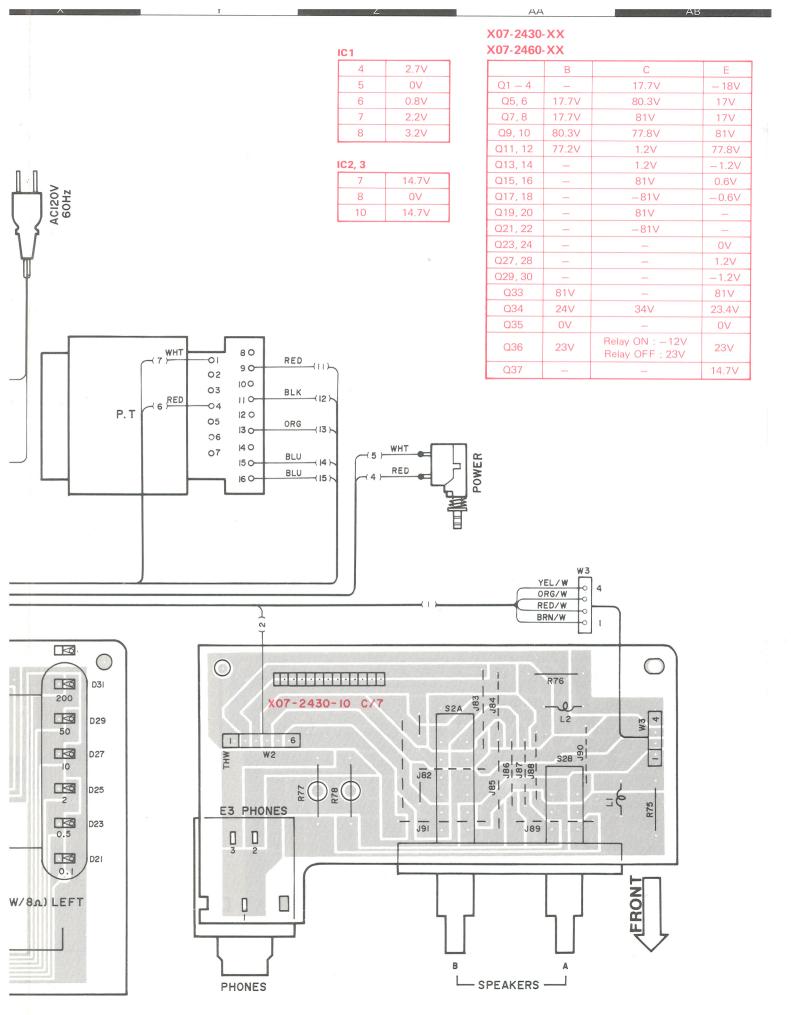
IC2, 3

102, 3						
7	14.7V					
8	0∨					
10	14.7V					

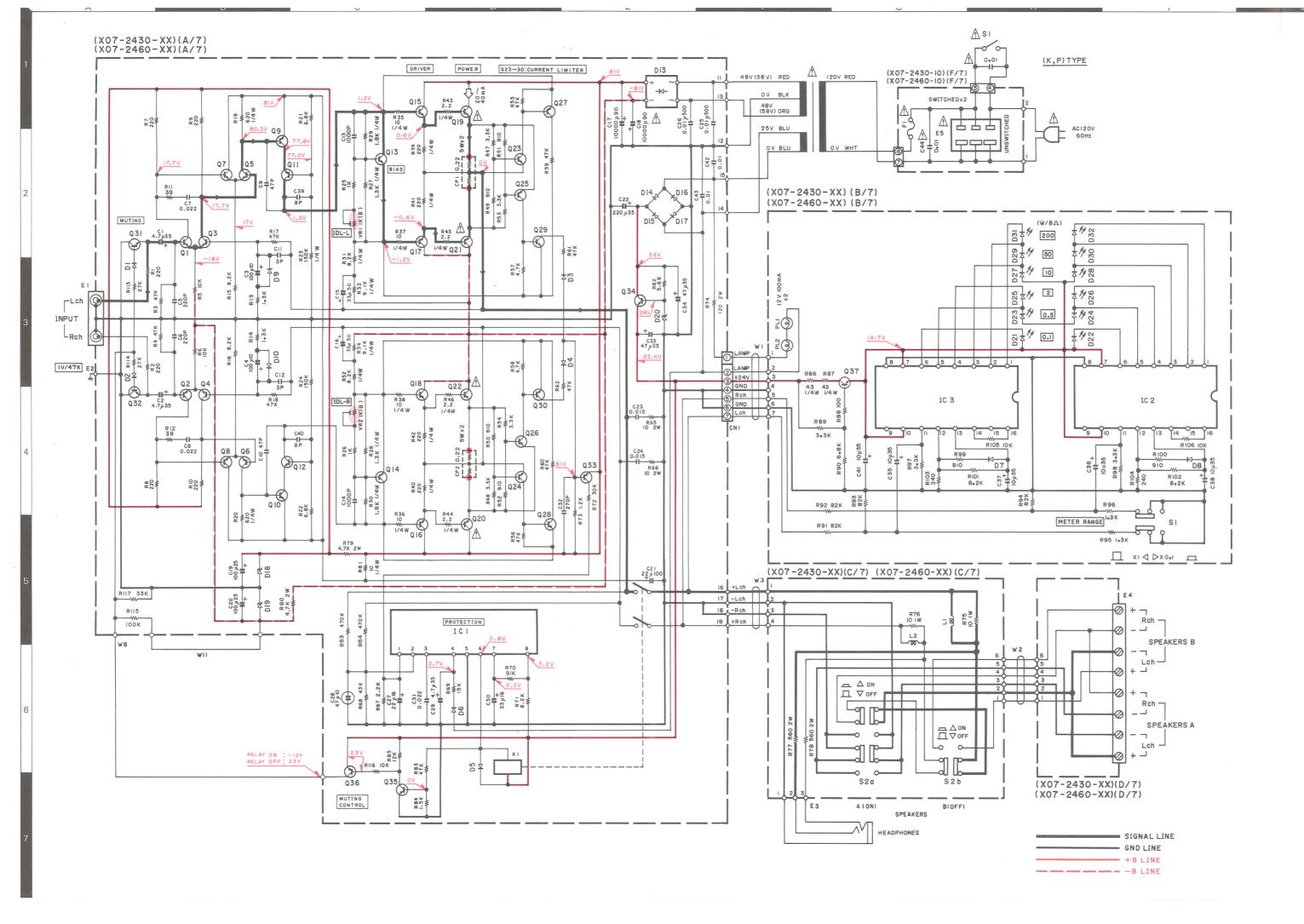


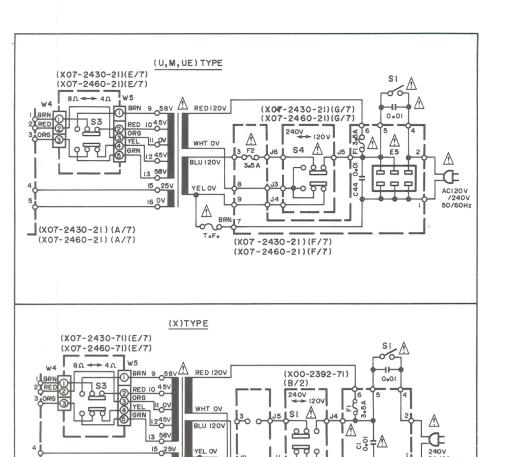


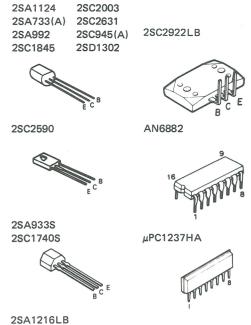




Refer to the schematic diagram for the values of resistors and capacitors.







2SC3419



2SA1535A 2SC3944A

(XO7-2430-XX) JAPAN MADE (X07-2460-XX) SINGAPORE MADE

(X07-2430-71) (A/7) (X07-2460-71) (A/7)

DESTINATION	Ref • No.	E/7	F/7	G/7	J92	J 93,94
0-10	K	NO	YES	NO	YES	YES
0-21	U,M,UE	YES	YES	YES	YES	NO
0-71	×	YES	NO	NO	NO	NO

16 OV

Æ

(X00 - 2392-71)(A/2)

ICI

IC2,3

ponents only with manufacturer's recommended parts (refer to parts list). AIndicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

CAUTION: For continued safety, replace safety critical com-

- DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.
- Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
- Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen. Voltmeter ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

2SC1845(F,E) : 2SC945(A)(Q,P) or 2SC1740S(Q,R) Q5~8,23,24,35 $Q9,10,25 \sim 28,36$: 2SA733(A)(Q,P) or 2SA933S(Q,R) 2SA1124 (Q,R) Q11,12 Q13,14 2SC3419(Y) Q15,16 2SC3944A(Q,R) 2SA | 535A (Q.R) Q17.18 Q19,20 2SC2922LB Q21,22 2SA1216 LB Q29,30 2SC2631(Q,R,S) Q31,32 2SD1302(S,T) 033 2SA992(F,E) Q34 2SC2590(Q,R) Q37 2SC2003(L,K)

uPC1237HA

AN6882

D1,2,7~10 : ISS133 or ISS176 D3~6 ISSI31 or ISSI78 D13 \$15 VB20 D14~17 DSMIAI or S5566B RDISES(B) or HZSISN(B) DI8, 19

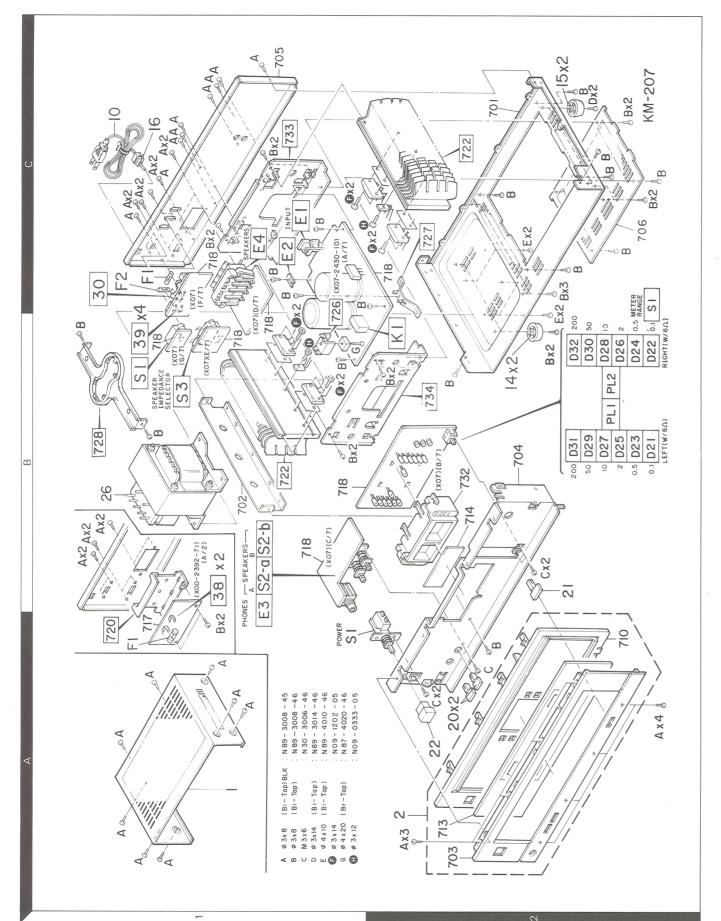
: RD24ES(B) or HZS24N(B) : B30-0431-05 D20

D21~32





EXPLODED VIEW





PARTS LIST

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

	Ref. No.	Address	Parts		Description	Desti- Renation ma
ŀ	参照書号	位置	新	部品香号	部品名/規格	仕 向備
l		KM-207				
	1 2	1A 2A	*	A01-1639-01 A20-5434-02	METALLIC CABINET PANEL ASSY	
	 			B46-0092-03 B46-0094-03 B46-0095-03 B46-0096-13 B46-0121-03	WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	K U <u>UE</u> U <u>UE</u> X P
			* * * *	B50-8670-00 B50-8671-00 B50-8672-00 B50-8673-00 B58-0223-04	INSTRUCTION MANUAL INSTRUCTION MANUAL INSTRUCTION MANUAL INSTRUCTION MANUAL CAUTION CARD (PRE-SET 120V)	PMX M M
	_			B58-0513-04 B59-0092-00	CAUTION CARD (PRESET220-240) SERVICE DIRECTORY	UE U <u>UE</u>
THE OWNER WHEN PERSON NAMED IN	10 10 10	1C 1C 1C		E30-0812-05 E30-0974-05 E30-1341-05	AC POWER CORD AC POWER CORD AC POWER CORD	U <u>UE</u> M KP X
	F1 F1 F1	1C 1C 1C		F05-3522-05 F05-3523-05. F05-7026-05	FUSE (SEMK®) (250V T3.5A) FUSE (250V 3.5A) FUSE (UL) (250V 7A)	X U <u>UE</u> M KP
			* *	H01-7792-04 H10-3645-02 H10-3646-02 H25-0223-04 H25-0232-04	ITEM CARTÓN CASE POLYSTYRENE FOAMED FIXTURE POLYSTYRENE FOAMED FIXTURE PROTECTION BAG (750X350X0.03) PROTECTION BAG (235X350X0.03)	
	14 15 16	2B 2C 1C		J02-0129-05 J02-0179-05 J42-0083-05 J61-0307-05	FOOT FOOT POWER CORD BUSHING WIRE BAND	
	20 21 22	2A 2B 2A		K27-0742-14 K27-1725-04 K29-2001-04	KNØB (BUTTØN) KNØB (BUTTØN) KNØB ASSY	2
	26 26	1B 1B		L01-7901-05 L01-7905-05	POWER TRANSFORMER POWER TRANSFORMER	KP U <u>UE</u> MX
ŀ	S1	1A		S40-1094-05	PUSH SWITCH (POWER TYPE)	
-	POWER SUP	PLY UN	IT (X00-2392-XX) -71: C91-0647-05	JAPAN MADE -72 : SINGAPORE MAD	E (X TYPE
	38	1B	*	E40-3054-05	PIN ASSY	
				F29-0072-05	INSULATING COVER	
			*	J13-0054-05 J21-3698-04 J61-0307-05	FUSE CLIP MOUNTING HARDWARE WIRE BAND	
L	S1 POWER	AMDI IT	len.	\$31-2126-05	SLIDE SWITCH (POWER TYPE)	
L			ıEK		JAPAN MADE (X07-2460-XX) : SINGAPORE -10 : K,P -21 : U,M,UE	MADE -71 : X
	D21 -32 PL1 ,2	2B 2B		B30-0431-05 B30-1140-05	LED(LN21CPH) LAMP (12V,0.1A)	

E: Scandinavia & Europe K: USA

UE : AAFES(Europe) X: Australia

U: PX(Far East, Hawaii) T: England M: Other Areas

P: Canada



PARTS LIST

* New Parts

Parts without Parts No. are not supplied.

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Telle ohne $\mbox{\bf Parts}\ \mbox{\bf No}.$ werden nicht geliefert.

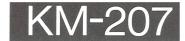
	Ref. No.		New Parts	Parts No.		escription			Re- marks
-	参照番号	位 置	新	部品香号	部品	名/規	格	仕 向	備考
	C1 ,2 C3 ,4 C5 ,6 C7 ,8 C9 ,10			CEO4KW1V4R7M CEO4KW1A1O1M CC45FSL1H221J CF92FV1H223J CC45FSL1H47OJ	ELECTR® ELECTR® CERAMIC MF CERAMIC	4. 7UF 100UF 220PF 0. 022UF 47PF	35WV 10WV J J J		
	C11 .12 C13 .14 C15 .16 C17 .18 C19 .20			CC45FSL1H04OC CF92FV1H1O2J CEO4KW1H33OM C9O-1394-O5 CEO4KW1E1O1M	CERAMIC MF ELECTR® ELECTR® ELECTR®	4. OPF 1000PF 33UF 10000UF 100UF	C J 50WV 90WV 25WV		
	C21 C22 C23 ,24 C25 ,26 C27			CE04KW2A220M CE04KW1V221M CF92FV1H153J CK45FE2H103P CE04KW1C220M	ELECTR® ELECTR® MF CERAMIC ELECTR®	22UF 22OUF 0.015UF 0.01OUF 22UF	100WV 35WV J P 16WV		
	028 029 030 031 032			C9D-1334-05 CE04KW1V4R7M CE04KW1C330M CF92FV1H223J CC45FSL1H271J	NP-ELEC ELECTR® ELECTR® MF CERAMIC	47UF 4. 7UF 33UF 0. 022UF 270PF	10WV 35WV 16WV J J		
	C33 ,34 C35 -38 C39 ,40 C41 C42 ,43			CE04KW1V470M CE04KW1V100M CC45FSL1H080D CE04KW1V100M CK45FF1H103Z	ELECTR® ELECTR® CERAMIC ELECTR® CERAMIC	47UF 10UF 8. OPF 10UF 0. 010UF	35WV 35WV D 35WV Z		
A	044			C91-0971-05	FILM	0.01UF	250WV	KPU <u>UE</u> M	
	30 E1 E2 E2 E3	10 10 10 10 10		E03-0078-05 E13-0229-05 E23-0077-05 E23-0149-05 E11-0162-05	AC NUTLET PHOND JACK TERMINAL TERMINAL PHONE JACK	(2P) (3P)		KPU <u>UE</u> M U <u>UE</u> M	
	E4	1C		E20-0823-05	LOCK TERMINA	L BØARD(E	IP)		
	39	1B		J13-0041-05	FUSE CLIP			KPU <u>UE</u> M	
	L1 .2			L39-0085-05	PHASE-COMPEN	SATION CO	IIL.	9	
				NO9-0333-05 NO9-1202-05	TAPPING SCREET TAPPING SCREET		+ロツカクサ゛) +ロツカクサ゛)		
	CP1 ,2 R19 ,20 R25 R27 ,28 R29 ,30			R90-0187-05 RD14AB2E621J RD14AB2E102J RD14AB2E132J RD14AB2E182J	MULTI-COMP FL-PROOF RD FL-PROOF RD FL-PROOF RD FL-PROOF RD	0.22X2 620 1.0K 1.3K 1.8K	K 5W J 1/4W J 1/4W J 1/4W J 1/4W	9	
	R31 +32 R33 +34 R35 -38 R39 -42 R43 -46			RD14AB2EB22J RD14AB2E912J RD14AB2E100J RD14AB2E221J RD14AB2E2R2J	FL-PROOF RD FL-PROOF RD FL-PROOF RD FL-PROOF RD FL-PROOF RD	8, 2K 9, 1K 10 220 2, 2	J 1/4W J 1/4W J 1/4W J 1/4W J 1/4W		
	R65 R66 R74 R75 ,76 R77 ,78			RS14DB3D100J RS14KB3D100J RS14DB3D121J RS14DB3A100J RS14DB3D561J	FL-PR00F RS FL-PR00F RS FL-PR00F RS FL-PR00F RS FL-PR00F RS	10 10 120 10 560	J 2W J 2W J 1W J 2W		

E: Scandinavia & Europe K: USA

P: Canada

U: PX(Far East, Hawaii) T: England M: Other Areas

UE: AAFES(Europe) X: Australia



PARTS LIST

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	Ref. No.	Address		Parts No.	Description	Desti-	Re-
	参照番号	位置	Parts 新	部品香号	部品名/規格		marks 備考
	R79 ,80 R81 VR1 ,2			RS14DB3D472J RD14GB2E10OJ R12-1083-O5	FL-PROOF RS 4.7K J 2W FL-PROOF RD 10 J 1/4W TRIMMING POT.(1KB)IDL-L,R		
≜	K1 S1 S2 S3 S4	2B 1B 1B		S51-2078-05 S40-2351-05 S42-2163-05 S31-2127-05 S31-2126-05	MAGNETIC RELAY PUSH SWITCH MULTIPLE PUSH SWITCH SLIDE SWITCH (POWER TYPE) SLIDE SWITCH (POWER TYPE)	U <u>UE</u> MX	
	D1 ,2 D1 ,2 D3 -6 D3 -6 D7 -10			198133 198176 198131 198178 198133	DINDE DINDE DINDE DINDE DINDE		
	D7 -10 D13 D14 -17 D14 -17 D18 •19			1SS176 S15VB20 DSM1A1 S5566B HZS18N(B)	DINDE DINDE DINDE DINDE ZENER, DINDE		
	D18 ,19 D20 D20 IC1 IC2 ,3			RD18ES(B) HZS24N(B) RD24ES(B) UPC1237HA AN6882	ZENER DI®DE ZENER DI®DE ZENER DI®DE IC(P®WER AMP) IC(7PT LED LEVEL METER DRIVER)		
	01 -4 05 -8 05 -8 09 ,10 09 ,10			2SC1845(F,E) 2SC17405(Q,R) 2SC945(A)(Q,P) 2SA733(A)(Q,P) 2SA9335(Q,R)	TRANSISTÖR TRANSISTÖR TRANSISTÖR TRANSISTÖR TRANSISTÖR TRANSISTÖR		
Δ	011 ,12 013 ,14 015 ,16 017 ,18 019 ,20			2SA1124(Q;R) 2SC3419(Y) 2SC3944A(Q;R) 2SA1535A(Q;R) 2SC2922LB	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Æ	021 ,22 023 ,24 023 ,24 025 -28 025 -28			2SA1216LB 2SC1740S(Q,R) 2SC945(A)(Q,P) 2SA733(A)(Q,P) 2SA933S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
	029 ,30 031 ,32 033 034 035			2SC2631(Q,R,S) 2SD1302(S,T) 2SA992(F,E) 2SC2590(Q,R) 2SC1740S(Q,R)	TRANSIST®R TRANSIST®R TRANSIST®R TRANSIST®R TRANSIST®R TRANSIST®R		
	035 036 036 037			2SC945(A)(Q,P) 2SA733(A)(Q,P) 2SA933S(Q,R) 2SC2003(L,K)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
				,		и	

E: Scandinavia & Europe K: USA

P: Canada

U: PX(Far East, Hawaii) T: England

M: Other Areas

UE: AAFES(Europe) X: Australia



SPECIFICATIONS

Rated Power Output

150 watts per channel minimum RMS, both channels driven, at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.03% total harmonic distortion.

Dodle alcales de debres	
Both channels driven	455 141 . 455 141
(8 ohms, 1 kHz)	155 W + 155 W
Music Power	
(8 ohms)	310 W + 310 W
Total Harmonic Distortion	
20 Hz to 20,000 Hz	0.015% at 1/2 rated power
	into 8 ohms
1 kHz	0.002% at 1/2 rated power
	into 8 ohms
Inter Modulation Distortion	
(60 Hz:7 kHz = 4:1)	0.002% at rated nower into
	8 ohms
Frequency Response	
	-3 dB
Power Bandwidth	
(0.2 % T.H.D., 8 ohms)	
Signal-to-Noise Ratio (IHF-A)	
Damping Factor	More than 35 at 50 Hz
General	
Power Consumption	5 A (USA and Canada)
	350 W (Others)
AC Outlets	,
	(Except some area)
Dimensions	
Dillicitatoria	H 123 mm (4-13/16")
	D 269 mm (10-9/16")
Weight (Net)	ช.5 kg (18./ lb)

Note:

We follow a policy of continuous advancements in developments. For this reason specifications may be changed without notice.

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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TRIO-KENWOOD FRANCE S.A.

Hi-Fi · VIDEO · CAR Hi-Fi

13, Boulevard Ney, 75018 Paris, France

TRIO-KENWOOD U.K. LTD.

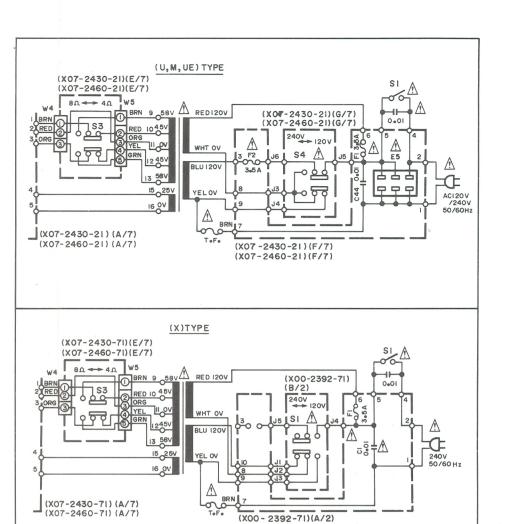
17 Bristol Road, The Metropolitan Centre, Greenford, Middx. UB6 8UP England

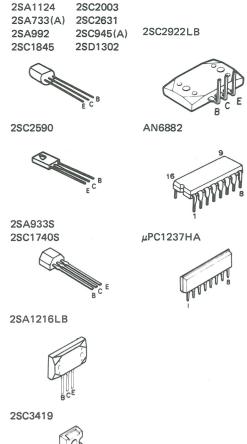
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4E Woodcock Place, Lane Cove, N.S.W. 2066, Australia

KENWOOD & LEE ELECTRONICS, LTD.

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(X07-2430-XX) JAPAN MADE (X07-2460-XX) SINGAPORE MADE

Ref . No.		E/7	F/7	G/7	J92	J 93,94
0-10	K	NO	YES	NO	YES	YES
0-21	U,M,UE	YES	YES	YES	YES	NO
0-71	×	YES	NO	NO	NO	NO

IC1 : µPC1237HA IC2,3 : AN6882 Q1~4 : 2SC1845(F,E) Q5~8,23,24,35 : 2SC945(A)(Q,P)

or 2SC1740S(Q,R) Q9,10,25 \sim 28,36 $\,$: 2SA733(A)(Q,P)

or 2SA933S(Q.R) Q11,12 2SA1124 (Q,R) Q13,14 2SC3419(Y) Q15,16 2SC3944A(Q,R) Q17,18 2SA | 535A(Q,R) Q19,20 2SC2922LB 021,22 2SA1216 LB Q29,30 2SC2631(Q,R,S) Q31,32 2SD1302(S,T) Q33 2SA992(F,E) 034 2SC2590(Q,R) Q37 2SC2003(L,K)

DI,2,7~10 : ISSI33 or ISSI76
D3~6 : ISSI31 or ISSI78
D13 : SI5VB20
D14~17 : DSMIAI or S5566B
D18, 19 : RDI8ES(B) or HZSI8N(B)

D20 : RD24ES(B) or HZS24N(B)
D21 ~ 32 : B30-0431-05

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). AIndicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

2SA1535A

2SC3944A

 DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.

 Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

 Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen. Voltmeter ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

